

## **MANAGEMENT PACKAGE FOR YIELD MAXIMIZATION OF HYBRID RICE IN BANGLADESH**

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### **Extended Summary**

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This study comprised three experiments and these experiments were carried out in Aman and Boro seasons, 2009-10. The objectives of the study was to investigate-(a) the growth yield performance of some popular commercial hybrid rice varieties in Aman and Boro seasons, and (b) effect of varying planting dates and number of seedling hill-1 on yield. Result indicated that specific leaf weight (SLW) was lower but crop growth rate (CGR) was higher up to reproductive stage in hybrid rice varieties compared to the inbred. Lower SLW in hybrid contributed to the higher LAI in hybrid. Hybrid varieties exhibited higher dry matter accumulation over the inbred only at the early growth stages in both season. Hybrid exhibited lower number of panicles m<sup>-2</sup> and grain filling percentage across the season. The higher grain yield of the hybrids in Boro season was due to their higher (27%) number of spikelets panicle<sup>-1</sup> and 1000 grain weight over inbred varieties. BRRI hybrid dhan2, Heera 6 and tia produced similar grain yield to the inbred due to there higher harvest index and productivity per day in Aman season. On the other hand, Sonarbangla 3, BRRI hybrid dhan 2, Heera 6 and Tia provided significantly higher grain yield compared to the inbred in Boro season. Result suggested that early planting of hybrid rice varieties with 2 seedling hill<sup>-1</sup> maximized the higher grain yield in Boro season. Tested hybrid varieties had no yield advantage over the inbred in Aman season.

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